FAIRFAX COUNTY DEER MANAGEMENT PROGRAM



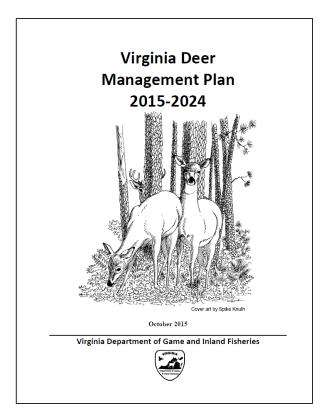
August 2022

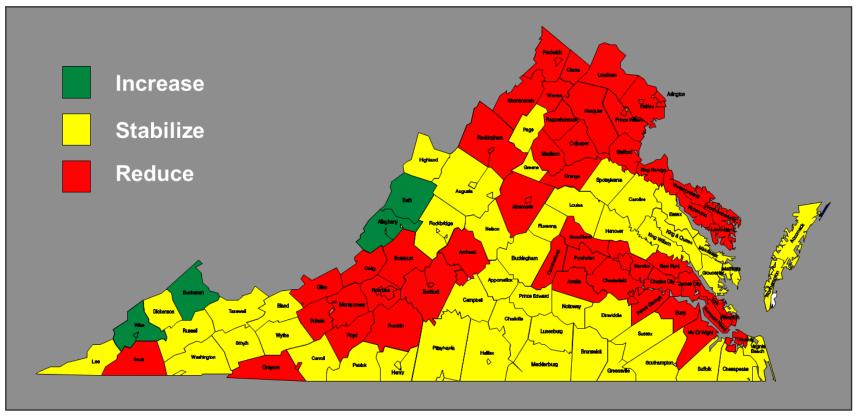
Katherine Edwards, Ph.D., Certified Wildlife Biologist® Wildlife Management Specialist Fairfax County Police Department, Animal Services Division

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Virginia Deer Management Plan (2015-2024) Deer Population Objectives





Population Goal: Manage local deer populations to balance the varied needs and reasonable expectations of a diverse human community (cultural carrying capacity), the requirements of a biologically diverse ecosystem, and the anticipated future social/ecosystem demands. Hunting is the preferred population management method, where appropriate and feasible.

Fairfax County Deer Management Program

- Approved by the Fairfax County Board of Supervisors in 1998
- Implemented by the Fairfax County Police Department in collaboration with the Fairfax County Park Authority, NOVA Parks, and other stakeholders
- Safety Concerns
- Health Concerns (public health and herd health)
- Ecological Damage

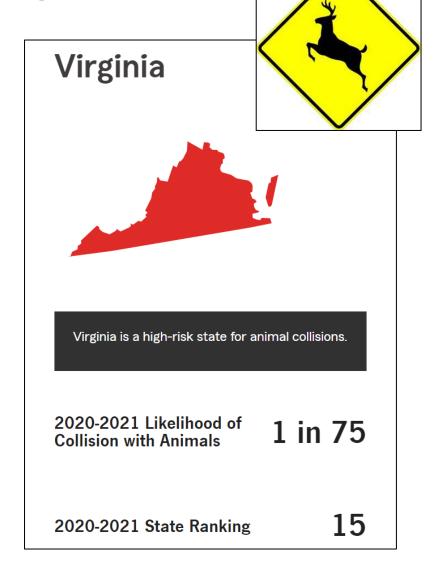






Deer-Vehicle Collisions





Wildlife and Public Health

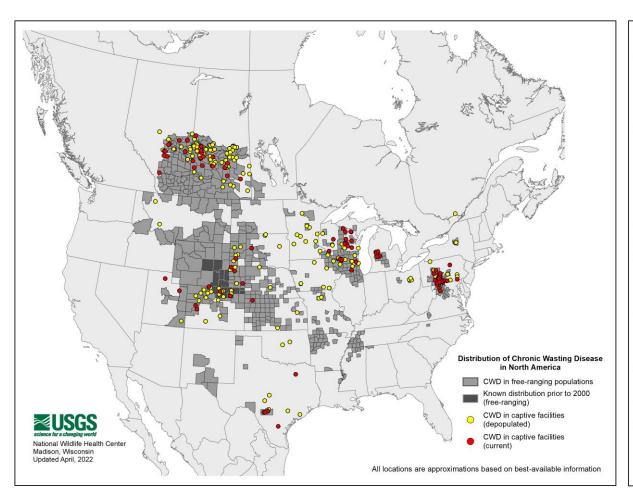
- Dense deer populations are inferred to be one of the principal factors in the increase of ticks in many urban environments leading to public concern over disease transmission.
- Adult ticks feed and mate primarily on deer but the deer themselves do not serve as a source of infection for the Lyme disease bacterium.
- The presence of deer has been correlated with tick populations to variable degrees and some studies have found that reduction of deer populations to very low thresholds may reduce tick abundance; however, the relationship between deer populations and incidence of Lyme disease remains unclear.

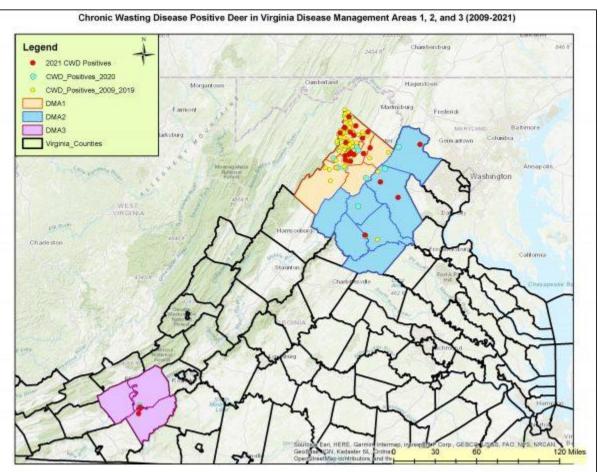




https://www.fairfaxcounty.gov/wildlife/fairfax-county-4-poster-pilot-study

Deer Herd Health - Chronic Wasting Disease





Ecological Impacts

- 1. Consumption of seedlings and saplings hinders forest regeneration
- 2. Forest structure impaired, understory layers removed and overstory simplified
- 3. Forest composition changed for decades
- Loss of Ecosystem Services (clean water, clean air)
- 5. Loss of biodiversity



Fairfax County Deer Management Program

- Based on best practices for deer management, deer census data, environmental impact studies, and peer-reviewed scientific literature
- Utilization of current state-approved deer population control tools:
 - Archery
 - Firearms managed hunts
 - Sharpshooting
- Utilization of currently available deer management tools:
 - Humane Exclusion, Repellency and Habitat Modification
- Collaboration with Private & Public Property Owners

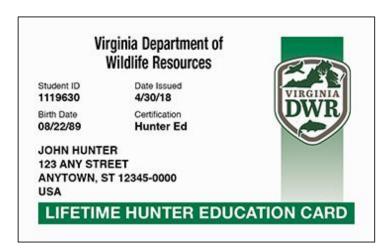
- Operated on public lands Approximately 100 parks and county properties in the program (>80% of county parkland)
- Upcoming FY 2023 Program Dates:
 September 10, 2022 February 18, 2023
- Hunting is allowed Monday through Saturday (no Sunday hunting in parks)
- Legal hunting hours: 30 minutes prior to sunrise <u>until</u>
 30 minutes past sunset
- Parks remain fully open to the public
- Zero safety incidents since program's inception



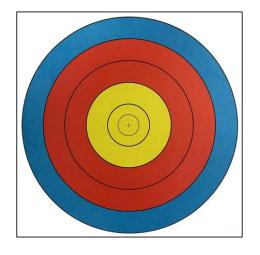
- Archers must pass a criminal background check
- Disqualifying convictions include, but are not limited to
 - Any type of child exploitation violation
 - Domestic violence
 - Weapons charges
 - Game violations
 - Animal cruelty
 - Any felony



- All participants must comply with state regulations including game licensing and Hunter Safety Education as mandated by the Virginia Department of Wildlife Resources
- Must complete course through the International Bowhunter Education Program
- Must pass archery qualifications with their bow at specified ranges to be eligible







- Archers will harvest deer only in their assigned park(s)
- Responsible for regular communication between archery group members, group leaders, and the Deer Program Manager with Fairfax County Police
- Reporting required:
 - Date, address, hunt times, deer observed, number of shots taken and retrieved, number of deer shot and retrieved, sex & age of deer
 - Data entered into electronic database within 24 hours of each hunt
- Incident Report filed for non-retrieved deer, lost archery tackle, poaching, hunter injury, theft or damage to equipment, hunter harassment or any deviation to protocol

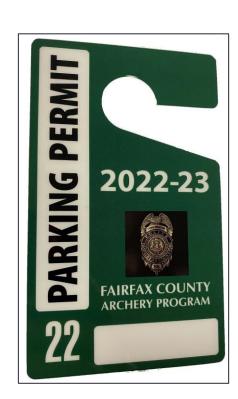
- ALL archery conducted from tree stands:
 - Hang on, climbers, saddles, tripods, and ladder stands are permitted
 - Elevated position (15 feet)
 - Ground used as backdrop
 - Shots taken at motionless target
- Stands are permitted no closer than:
 - 100 feet from park property line
 - 50 feet from park trails
- Ground blinds <u>are not permitted</u>.
- Archers <u>may not</u> enter private property without permission by the owner or tenant.



- Operates under a Deer Population Control Permit (DPOP).
- Earn-A-Buck (EAB) is in effect per DWR Regulations. During a license year, it shall be unlawful to take a second antlered deer in Fairfax County prior to taking at least two antlerless deer in Fairfax County, and it shall be unlawful to take a third antlered deer in Fairfax County prior to taking at least three antlerless deer in Fairfax County.
- Must notch a deer tag (DPOP or Personal Tag) before moving the deer.
- Personal tags will be used for antlered bucks.
- Archers must check their deer and get a DWR confirmation number.
- Deer must be moved from public view before field dressing.
- Archers must cover harvested deer completely while transporting.

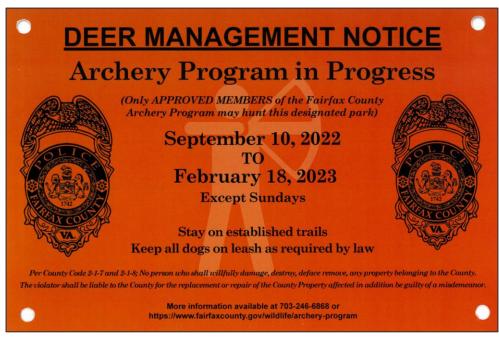
When on-site:

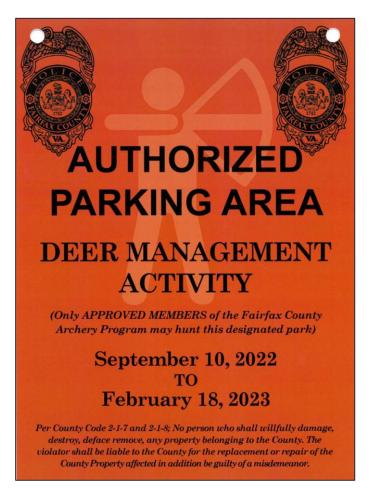
- Archery Program ID
 - Each hunter is issued a unique ID # and lanyard
 - Must be worn on the outside of clothing while:
 - Entering and exiting the park
 - During any scouting, tracking, set-up or take down activities
 - This ID number must be visible on equipment:
 - All arrows
 - Tree stands
 - Game/trail cameras
- Parking tag with ID number hung on rear-view mirror
- DPOP permit copy kept in glove box











Archery program signs (left/center) are posted at park entrances and trailheads. Hunters can only park at authorized parking areas labeled with signs (right).

Fairfax County Deer Management Program – Managed Hunts

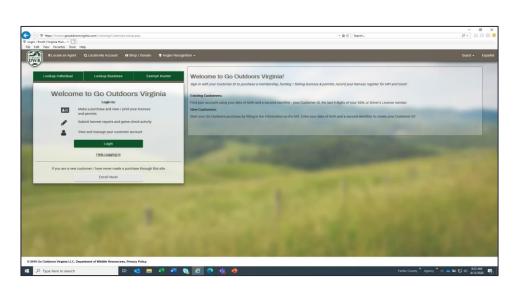
- Managed firearms hunt Qualifications and lottery system
- Area is secured by Fairfax County Police Department personnel
- Hunting is only permitted in designated hunt areas from elevated tree stands (Sully Woodlands - Appendix J area of County)
- Operated under a deer population control permit (DPOP)

All harvested deer must be taken to the designated check station for data

collection (weight, age, sex) and tagging







Fairfax County Deer Management Program - Sharpshooting

- Night-time operations conducted by Fairfax County Police Department
- Park is secured and operation is conducted when parks are closed to the public
- Shooting at static locations over bait from elevated position, such as a ladder stand or lift, using ground as natural backstop
- Night-vision equipment, thermal imaging and suppressed firearms
- Camera stations set up at each location to monitor deer
- Venison donated to local food banks, including Hunters for the Hungry







Fairfax County Deer Management Program Public Notification

- Notification letters mailed to property owners adjacent to approved park sites (>23,800 letters for FY 2023)
- Public information meetings/webinars
- HOA and Civic Association Meetings
- Press releases, county blogs (FCPD and OPA) and videos (Channel 16, Fairfax County YouTube)
- Fairfax County Deer Management website
- Deer Management Program signs



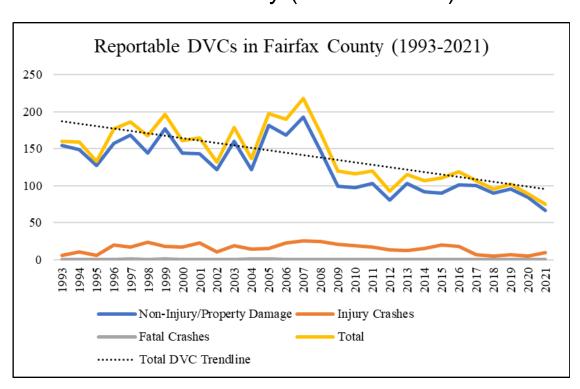
Deer Management Data Collection Deer-Vehicle Collisions

- Deer-vehicle collisions are the primary cause of deer deaths in suburban areas without other lethal control.
- Reportable crashes (TREDS)
 - Not all crashes are "reportable"
 - Includes crashes that result in injury, fatality, or property damage >\$1,500
- Insurance companies
 - Data not accessible to county staff
 - Statewide numbers are available to VDOT but insurance companies do not provide location data for crashes
- VDOT work orders for carcass pickup
- Not all collisions result in deer dying on or near the roadway some survive or may expire elsewhere

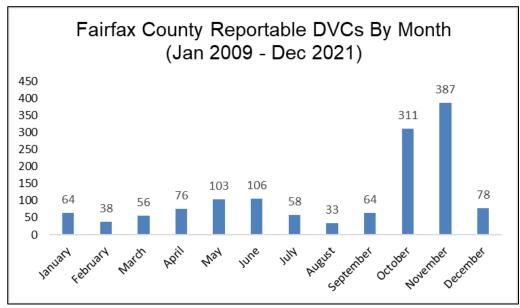
Deer Management Data Collection - Deer-Vehicle Collisions

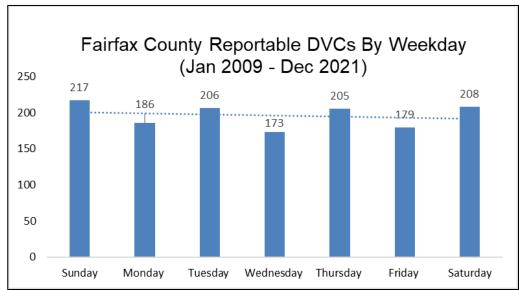
Fairfax County Reportable Deer-Vehicle Collisions				
	Non-Injury/	Injury	Fatal	
Year	Property Damage	Crashes	Crashes	Total
1993	154	6	0	160
1994	149	10	0	159
1995	127	6	0	133
1996	157	20	0	177
1997	168	17	1	186
1998	144	23	0	167
1999	177	18	1	196
2000	144	17	0	161
2001	143	22	0	165
2002	122	10	0	132
2003	160	19	0	179
2004	122	14	1	137
2005	181	15	1	197
2006	168	22	0	190
2007	193	25	0	218
2008	147	24	0	171
2009	99	21	0	120
2010	97	19	0	116
2011	103	17	0	120
2012	80	13	0	93
2013	103	12	0	115
2014	92	15	0	107
2015	90	20	0	110
2016	101	18	0	119
2017	100	7	0	107
2018	90	5	0	95
2019	95	7	0	102
2020	84	5	0	89
2021	66	9	0	75

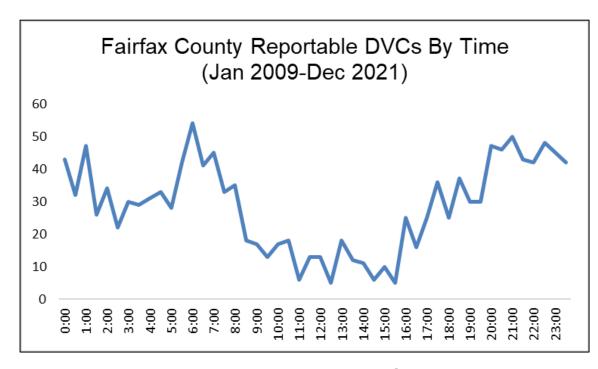
Reportable Deer-Vehicle Collisions Fairfax County (TREDS data)



Deer-Vehicle Collision Trends





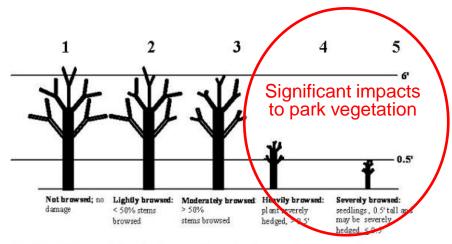


Reportable Deer-Vehicle Collisions Fairfax County (TREDS data)

Deer Management Data Collection - Browse Surveys

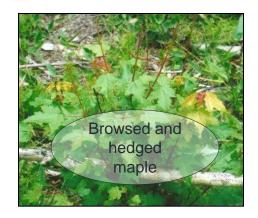


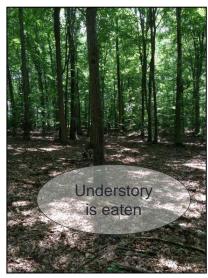




Seedlings > 0.5' provide best evidence of browsing damage. Under severe deer browsing, seedlings may never exceed 0.5' tall and will be severely hedged*: deer browsing keeps them suppressed below 0.5'. Small, current year seedlings may never grow above 0.5' under severe deer browsing.

* Severely hedged = seedling browsed repeatedly over years; all stems short, thick, with "bonsai" appearance.







Deer Management Data Collection - Camera Surveys

- Standardized approach based on Jacobson et al. (1997) using infraredtriggered cameras to estimate deer at a bait station.
- Restrictions on time of year that <u>baited</u> camera surveys can be conducted.
 - Should be conducted post-fawning season but prior to antler drop (May to January)
 - State regulations now prohibit feeding deer year-round in Fairfax
 County (requires special approval from DWR to conduct baited survey)
- Allows consistency in sampling and comparison among parks over time to establish trends.
 - Does not represent a complete census or exact number of deer.
 - Not used to set bag limits in individual parks.

Deer Management Data Collection - Camera Surveys







Jacobson, H.A., J.C. Kroll, R.W. Browning, B.H. Koerth, and M.H. Conway. 1997. Infrared-triggered cameras for censusing white-tailed deer. Wildlife Society Bulletin 1997, 25(2):547-556.





Deer Management Data Collection - CWD Surveillance

- Staff are conducting sampling of white-tailed deer for CWD surveillance from hunter-harvested deer and sharpshooting operations.
- Staff were trained by personnel with the Virginia Department of Wildlife Resources (DWR) and follow state agency guidelines for the sampling of deer and testing for CWD.



- Medial retropharyngeal lymph node samples are collected from yearling and adult deer (no fawns tested).
- Samples are submitted to the Wisconsin Veterinary Diagnostics Laboratory for CWD testing.
- All results to date have been "CWD Not Detected."
- All test results are reported to the DWR State Wildlife Veterinarian and Wildlife Disease Biologist.



Photo: Deer with Chronic Wasting Disease. Missouri Department of Conservation.

Deer Management Data Collection - CWD Surveillance

FY 2020 (2019-2020 deer season)

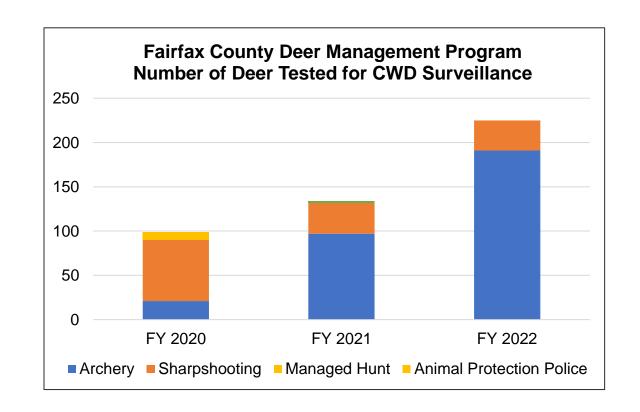
- 99 deer sampled from 21 parks
- 48 does and 51 bucks

FY 2021 (2020-2021 deer season)

- 132 deer sampled from 55 parks, plus 2 deer dispatched by Animal Protection Police
- 74 does and 60 bucks

FY 2022 (2021-2022 deer season)

- 225 deer sampled from 72 parks
- 111 does and 114 bucks



Year-Round Deer Feeding Ban

- Feeding of deer in Fairfax County is now prohibited year-round in accordance with state wildlife regulation (4VAC15-40-285. Unauthorized feeding of cervids.)
- Feeding of deer is prohibited in any county designated by the DWR within 25 miles of a confirmed detection of Chronic Wasting Disease. Although CWD has not been detected in Fairfax County at this time, the year-round feeding ban was extended to Fairfax County due to the proximity of CWD-positive deer confirmed within Fauquier and Loudoun counties.
- The feeding ban restricts the placement or distribution of any food, salt, mineral or similar substances for any purpose if the placement of these materials results in the attraction of and/or feeding of deer. This does not restrict bona fide agronomic plantings (including wildlife food plots), bona fide distribution of food to livestock or wildlife management activities conducted or authorized by the Virginia Department of Wildlife Resources. The feeding ban applies to both public lands and private properties within the Commonwealth.

Fairfax County Deer Management Program Summary Statistics (FY 2022)

	Archery Harvest				
Archery Program Locations			Antlered	Antlerless	
	Doe	BBa	Buck	Buck	Total
Accotink Stream Valley Cluster	17	3	8	0	28
Bull Run Marina Cluster	3	0	2	0	5
Bull Run Regional Park Cluster	7	0	9	0	16
Clifton Cluster	13	3	8	0	24
Colvin Run Cluster	12	6	9	0	27
Cub Run Cluster	48	6	36	0	90
Elklick Cluster	40	4	18	1	63
Fairfax Station Cluster	14	0	6	0	20
Fountainhead Cluster	15	1	6	0	22
Great Falls Cluster	36	7	20	0	63
Huntley Meadows Cluster	54	4	21	1	80
Lake Accotink Cluster	14	5	10	1	30
Laurel Hill Cluster	39	6	20	1	66
Pohick Stream Valley Cluster	11	3	10	0	24
Reston Cluster	25	2	14	1	42
South Run Cluster	9	2	6	0	17
Sugarland Cluster	33	5	21	0	59
Vienna Cluster	33	5	12	0	50
Archery Total	423	62	236	5	726

Sharpahaating Operation	Sharpshooting Harvest				
Sharpshooting Operation Locations	Doe	BBª	Antlered Buck	Antlerless Buck	Total
Annandale Community Park	1	1	4	0	6
Bren Mar Park/ Turkeycock Run Stream Valley	2	1	0	0	3
Chapel Road Park	5	0	0	0	5
Dranesville Tavern/ Grand Hamptons Park	3	0	0	0	3
Franconia Park/ Monticello Woods Park	2	1	0	0	3
Frying Pan Farm Park	3	1	4	3	11
Green Spring Gardens	0	0	1	0	1
Huntley Meadows Park/ Dogue Creek Stream Valley	5	2	5	5	17
Sharpshooting Total	21	6	14	8	49

^aButton buck

FY22 Deer Management Program Non-Recovery Total: 9.57%

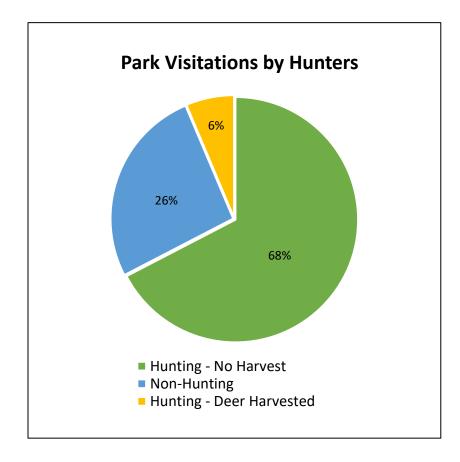
Fairfax County Deer Management Program Summary Statistics (FY 2022)

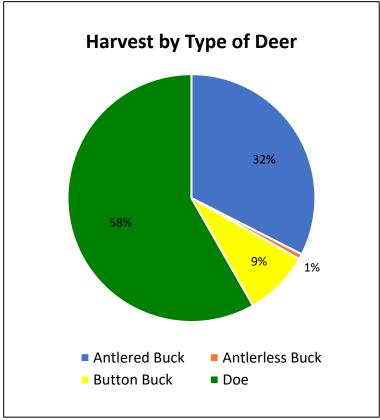
Harvest Method	Harvest	Percent Total Harvest
Archery	726	93.68%
Sharpshooting	49	6.32%
FY22 Total Program Harvest	775	100.00%

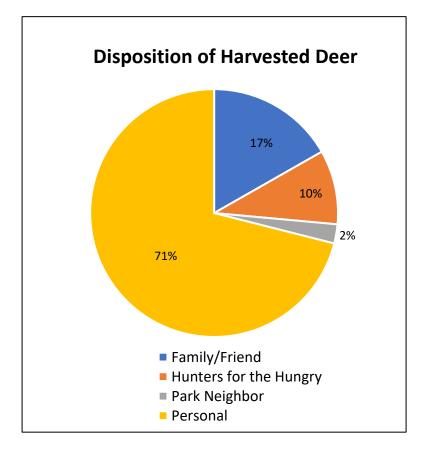
	Sex Ratio Percentage of Harvests			
Harvest Method	Doe	BBa	Antlered Buck	Antlerless Buck
Archery	58.26%	8.54%	32.51%	0.69%
Sharpshooting	42.86%	12.24%	28.57%	16.33%
Sex Ratio Percentage (Total)	57.29%	8.77%	32.26%	1.68%

Antlerless vs. Antlered Deer Totals	Harvest		Total	Antlerless
Antieriess vs. Antiered Deer Totals	Antlerless	Antlered	Harvest	Percentage
Archery	490	236	726	67.49%
Sharpshooting	35	14	49	71.43%
Antlerless vs. Antlered (Total Harvests)	525	250	775	67.74%

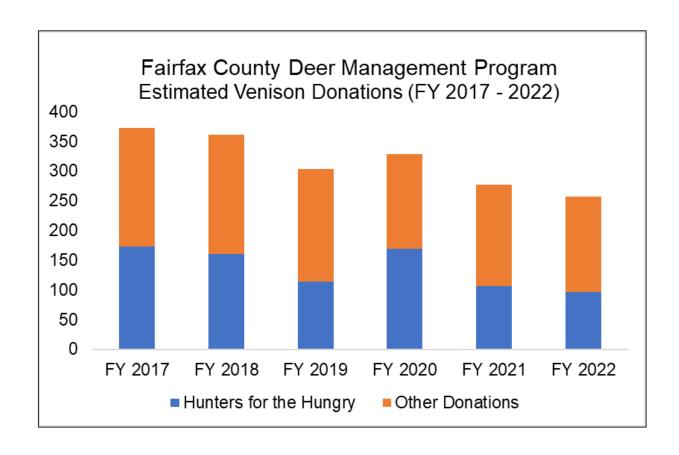
Fairfax County Deer Management Program Summary Statistics (FY 2022)







Fairfax County Deer Management Program Venison Donations (FY 2017-2022)

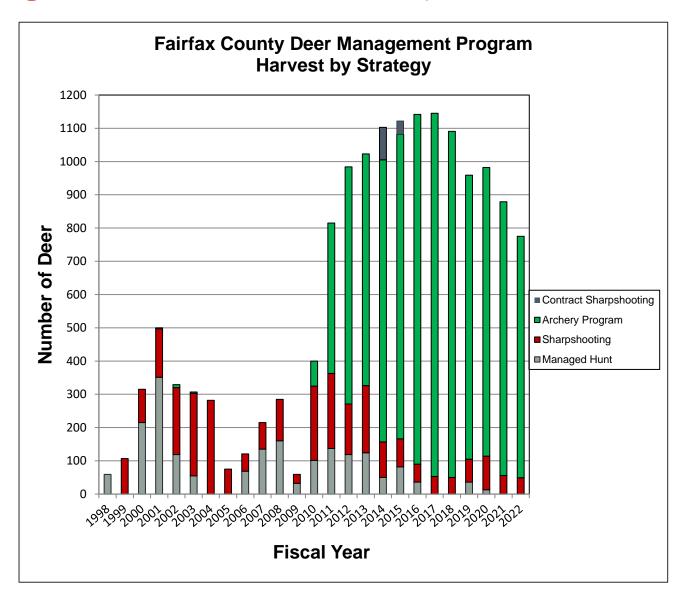


Fiscal Year	Deer Donated	Estimated Pounds of Venison Donated*		
FY 2017	372	11,160		
FY 2018	361	10,830		
FY 2019	303	9,090		
FY 2020	329	9,870		
FY 2021	277	8,310		
FY 2022	257	7,719		

^{*}Conservative estimate based on 30 lbs. of venison per deer harvested

6-Year Total Deer Donations = 1,899 deer Estimated 56,979 lbs. of donated venison*

Program Harvest Totals (FY 1998-2022)



Fairfax County Deer Management Program FY 2023 Program Changes

Archery Program Park Additions

- Braddock District: Country Club View Park and Fairfax Villa Park
- Lee District: Groveton Heights Park, Loisdale Park, and Ridgeview Park
- Mount Vernon District: Grist Mill Park, Paul Springs Stream Valley (portion), Kirk Park (portion), and Pole Road Park

Managed Hunts: Managed shotgun hunts will not be conducted during FY 2023.

Sharpshooting Park Addition: Meadowlark Botanical Gardens (Hunter Mill District)
The upcoming sharpshooting schedule will also include Bren Mar/Turkeycock Run Stream Valley,
Franconia Park/Monticello Woods, Frying Pan Farm Park, Green Spring Gardens, and Huntley
Meadows/Dogue Creek Stream Valley (late season), that have been included in prior years.

FAIRFAX COUNTY DEER MANAGEMENT CONTACTS AND RESOURCES

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Fairfax County Animal Protection Police 703-691-2131

Virginia Wildlife Conflict Helpline (855) 571-9003 Monday – Friday 8:00AM-4:30PM (DWR & USDA Wildlife Services)

Deer Management Program website:

https://www.fairfaxcounty.gov/wildlife/deer-management-program